

University of Nebraska - Lincoln

DigitalCommons@University of Nebraska - Lincoln

Crop Watch

Extension

9-30-1994

CropWatch No. 94-21, Sept. 30, 1994

Lisa Brown Jasa

University of Nebraska-Lincoln, ljasa@unlnotes.unl.edu

Follow this and additional works at: <https://digitalcommons.unl.edu/cropwatch>



Part of the [Agriculture Commons](#)

Brown Jasa, Lisa, "CropWatch No. 94-21, Sept. 30, 1994" (1994). *Crop Watch*. 74.
<https://digitalcommons.unl.edu/cropwatch/74>

This Article is brought to you for free and open access by the Extension at DigitalCommons@University of Nebraska - Lincoln. It has been accepted for inclusion in Crop Watch by an authorized administrator of DigitalCommons@University of Nebraska - Lincoln.



CROP WATCH

University of Nebraska Cooperative Extension
Institute of Agriculture and Natural Resources

No. 94-20
Sept. 16, 1994

Sorghum, corn exhibit stalk rot

Stalk rot in both corn and sorghum has begun to make its annual appearance throughout Nebraska, according to reports from central, northeastern, south-east and south central areas.

Be alert to stalk rot symptoms as corn and sorghum mature. The development of stalk rots is favored by a stressful post-flowering environment. Such stresses include leaf blights, excessive cloudiness, stalk- or root-boring insects, crowded plants, drought or too much moisture, and hail/wind damage, all of which lower the amount of photosynthate produced by the plant. Yield losses vary from field to field and from year to year. Losses may be direct (due to poorly filled ears or lightweight or unfinished heads) or indirect through harvest losses because of stalk breakage or lodging.

It looks like we have bumper crops in corn and sorghum this year. Let's not lose them because of inattention to stalk rots. Scout your fields now, particularly those planted to early maturing varieties. Estimate the extent of stalk rot development by determining the

Use desiccants to dry weeds, facilitate grain harvest

Desiccants can be used to dry weeds in soybeans and grain sorghum, facilitating harvest. Desiccants should not be applied until the crop matures. Early applications will have the same effect on crop yields as frost. Timely early harvest is especially important where wheat is to be seeded after harvest.

Gramoxone Extra is registered as a desiccant for soybeans. For indeterminate soybean varieties (most of those grown in Nebraska), applications should be made after 65% of the soybean pods have turned brown. The treatment will "dry up" green weeds and speed the crop dry-down. However, Gramoxone Extra falls short of drying up black nightshade berries.

Roundup is registered as a preharvest treatment for soybeans. Applications are to be made after soybean pods have lost all green

color, and a minimum of seven days before harvest. Aerial applications are limited to a maximum rate of 1 quart Roundup per acre. This treatment is not effective in drying up black nightshade berries.

Sodium chlorate, available under several trade names, is available as a desiccant for grain sorghum. Apply after the sorghum is ready for a frost (grain moisture of 30% or less). Sodium chlorate is widely used in the south as a cotton desiccant. On short notice it is often unavailable in our area. If sodium chlorate use is anticipated, make arrangements with a supplier now.

Alex Martin
Extension Weeds Specialist
John McNamara
Extension Assistant, Weed Science

percentage of "crushable stalks" in several locations throughout the field. Fields having the highest potential for stalk rot damage should be flagged for first harvest as soon as kernel moisture allows.

David S. Wysong
Extension Plant Pathologist

Inside

Harvest residue	136
Crop conditions	136
Weed control in alfalfa	137
Killing alfalfa	137
Grain cleaners	138
Fall weed control	139
Soil moisture levels	140
Nebraska weather data	142



UNIVERSITY OF NEBRASKA-LINCOLN, COOPERATING WITH THE COUNTIES AND THE U.S. DEPARTMENT OF AGRICULTURE



It is the policy of the University of Nebraska-Lincoln Institute of Agriculture and Natural Resources not to discriminate on the basis of sex, age, handicap, race, color, religion, marital status, veteran's status, national or ethnic origin or sexual orientation.

Uniform residue distribution at harvest will ease planting next spring

How producers deal with residue behind the combine now is going to influence how plants and herbicides work next spring.

A lot of residue can pass through a large combine working six or more rows. The spreader on back of the combine may not effectively spread the residue or chaff, creating concentrated windrows behind it. Next spring, the areas with more residue on top of the soil may mat, making it difficult to move a planter through the field.

If the combine fails to distribute the residue evenly and is creating windrows, consider using a spreader or chopper. In addition,

a chaff spreader may be needed to spread the material which comes off of the sieves. Set up the spreader so the residue does not hit the unharvested crop.

Spreaders and chaff spreaders are driven hydraulically or by a V-belt. They can be purchased from several manufacturers — just make sure whichever one you choose will work with your combine.

If the residue is already windrowed and the conservation plan allows tillage, the residue can be redistributed with tillage, or a flail-type shredder can also be used to chop up and spread out the residue.

Improved weed control is another benefit of uniform residue distribution. In addition, herbicides applied to windrowed areas usually are less effective. Residue in a windrow will act as an insulator, keeping the soil cooler and holding moisture better than the warmer soil three feet away from it.

Taking time now to ensure even residue distribution can reduce planting headaches next spring.

Bobby Grisso
Extension Engineer
Paul Jasa
Agricultural Engineer

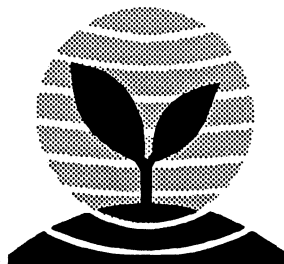
Nebraska crop update

Last week's warm, dry weather contributed to the continued rapid maturity of corn, sorghum and soybeans, while hindering pasture regrowth and fall-seeded crops, according to the Nebraska Agricultural Statistics Service.

In a report released Monday, the Service reported that 91% of Nebraska corn was rated in good to excellent condition, with 8% fair and 1% poor. Soybean condition was rated at 84% good to excellent, 15% fair and 1% poor. About one-third of the crop was reported to be mature, nearly one week ahead of the five-year average.

Sorghum condition was rated at 88% good to excellent, 8% fair, 1% poor, and 3% very poor.

Alfalfa was rated at 70% good to excellent, 26% fair, 2% poor and 2% very poor.



CROPWATCH

© 1994 University of Nebraska

Crop Watch is published from March through November by the University of Nebraska Institute of Agriculture and Natural Resources Communication and Computing Services, PO Box 830918, 108 Agricultural Communications Bldg., UNL, Lincoln, NE 68583-0918. To order a subscription or to change your address, write to *Crop Watch*, Box 830918, 108 Agricultural Communications Bldg. or call (402) 472-7981.

Lisa Brown Jasa, Editor

For more information about a particular subject, write the authors at the addresses below:

UNL Department of Entomology
202 Plant Industry Bldg.
Lincoln, NE 68583-0816

UNL Department of Agronomy
279 Plant Science Bldg.
Lincoln, NE 68583-0915

UNL Department of Plant Pathology
406 Plant Science Bldg.
Lincoln, NE 68583-0722

UNL Department of Agricultural Meteorology
236 L.W. Chase Hall
Lincoln, NE 68583-0728

Fall applications efficient for controlling weeds in alfalfa

Weed control in established alfalfa can be easily achieved through fall treatments. Weed populations should not be allowed to achieve high numbers or become competitive with the alfalfa. A herbicide treatment in the absence of good cultural practices will seldom give the desired results. Management is a major role in maintaining weed-free alfalfa stands.

Few weeds can compete with vigorously growing alfalfa that is mowed two or more times a season. Mowing healthy alfalfa at the right time weakens -- and may kill -- most annual and many perennial weeds. Herbicides can be integrated with proper cutting frequency and effective insect control measures so the alfalfa production is maximized and weed growth minimized.

Kansas crop update

Corn and sorghum harvests are underway across much of Kansas this week, according to a report Monday from the Kansas Agricultural Statistics, the County Extension Service, and the National Weather Service.

Ninety-eight percent of the corn acreage has reached the dent stage, compared

to 75% at this time last year and the average of 80%. Across the state, 65% of the crop is mature, ahead of 45% in 1993 and the average of 55%.

(Continued on page 138)

Treatments such as Karmex, Lexone, Sencor, Sinbar, and Velpar will control both winter annual grasses and broadleaf weeds in alfalfa established one year or longer. These treatments are made in late fall or early spring to dormant alfalfa to control winter annuals such as downy brome and pennycress. Karmex fits best on soils with low organic matter. These herbicides may cause alfalfa injury if the soil organic matter is less than 1%.

Butyrac, Butoxone (2,4DB), and Buctril can also be used for broad-leaf weed control, but are temperature sensitive. Butyrac and

Butoxone (2,4DB) should not be used if the temperature will drop to 40 degrees within three days following application. At 40 degrees the growth processes of many weed species will slow down and, consequently, the herbicide activity will be reduced. In order to avoid injury to the alfalfa, Buctril should not be used if temperatures are above 70 degrees. Buctril and 2,4-DB will not control mustard larger than 1" in diameter.

Alex Martin

Extension Weeds Specialist

John McNamara

Extension Assistant-Weed Science

Kill alfalfa stands and leave residue for soil protection

As an alfalfa stand ages, it becomes less productive and eventually must be replaced. Two to three alfalfa plants per square foot will produce maximum yields in older stands on dryland. Stands thicker than this will not produce more forage because the lack of moisture limits production. Therefore, it is usually best to rotate to another crop for several years before reseeding alfalfa.

Fall is an excellent time to kill alfalfa with herbicides in preparation for next year's row crop. The increased use of no-till treatments makes this a popular alternative to plowing. Plowing is an age-old process in which the alfalfa is not always completely killed. Herbicides are more economical than plowing, very effective, and will

leave the soil in a condition which is less susceptible to erosion. Applying herbicides in the fall will eliminate hurried applications in the spring and possible planting delays due to product label restrictions.

An economical, consistent alfalfa control treatment is a combination of 1 qt 2,4-D (4 lb/gal) + 0.5 pt of Banvel per acre. Make sure that the alfalfa has at least 4" of top growth so there is sufficient plant surface area for herbicide uptake. Applications made in October prior to a hard freeze will produce the best results.

Alex Martin

Extension Weeds Specialist

John McNamara

Extension Assistant-Weed Science

Sort out grain fines to improve storage, reduce potential of financial loss

Fines, foreign material and broken kernels can create handling and storage problems if the grain is not properly cleaned before storage. This is particularly important when storing wet, damaged or immature grain. Fine material has an affinity for moisture, molds and insect infestations and stored grain with fines will have a higher resistance to airflow than clean grain. With natural air drying, clean grain is essential to its success.

Proper combine adjustment can help reduce the amount of fines and foreign material. Select a grain cleaner that requires little attention from the operator as it collects and conveys screenings away from the rest of the grain. Several types of cleaners are available:

Gravity screen: These are generally simple cleaners which simply pass the grain over a screen during handling. Some stand alone and are fed from an auger conveyor. Others are part of a permanent installation such as at the output of a bucket elevator.

Perforated auger: A section of the auger housing is perforated so that fines can be separated from the grain as it passes over. This cleaner has limited effectiveness when the auger is operated at 100% capacity. Unfortunately, when operating the auger at less than 100% capacity increased grain damage will occur.

Rotary screen: These cleaners use a rotating screen that tumbles and separates the fines from the grain stream. They can be very effective if operated correctly. Consult the manufacturer for specific operating instructions.

Cleaning is easier and more complete at low flow rates and with dry grain. Cleaning can be

accomplished after drying if the grain is to be dried and stored in separate bins. If you don't clean grain before drying, plan to spend more time cleaning the grain dryer. This upkeep is important for maintaining dryer capacity and reducing the possibility of fires.

Corn screenings are good feed and should be fed within several days of collection. Take care when feeding fines from damaged grain. Moldy, soft, partially rotted grain particles are screened with fines and may have toxins harmful to livestock.

When storing grain, be sure to keep the grain surface level. Peaked grain will result in increased airflow resistance in that portion of the bin. Also, fine material tends to accumulate at the center of the bin, increasing airflow resistance.

Grain spreaders can help eliminate this problem. When properly adjusted and operated, grain spreaders will leave the top surface of the grain level with the

fine material evenly distributed throughout the grain. The level surface and evenly distributed fine material results in a uniform airflow resistance throughout the bin.

The disadvantage of using a grain spreader is that most spreaders tend to pack the grain tighter in the bin. At first thought this might seem like a good idea since more grain can be stored in each bin; however, packing the grain increases airflow resistance. In these instances, consider limiting the depth of stored grain.

When a grain spreader is not used and the stored grain has fine material, remove the center core of grain from the bin. Generally a portion 5'-6' in diameter should be removed. This core will contain a higher concentration of fine material and should be cleaned before restoring.

David Jones
Assistant Professor
Biological Systems Engineering

Kansas crop update *(Continued from page 137)*

Eighty-five percent of sorghum stands are turning color, well ahead of the 65% one year ago and the average of 50%. One-fourth of the crop is mature, compared to 5% one year ago and the average of 10%. Harvest in the south central and southeastern districts is well underway, while producers in the rest of the state are just starting. Statewide, 4% of the crop is in the bin, compared to 1% in 1993 and the average of 2%. Condition is rated 78% good to excellent, 20% fair and 2% poor to very poor.

Across the state, 99% of the soybean acreage has podded,

compared to 99% last year and the average of 98%. Condition of soybean crop is rated 63% good to excellent, 34% fair and 3% poor to very poor. Wheat planting progressed well in the west central and southwestern regions. Statewide, 10% of the wheat acreage is seeded, compared to 5% in 1993 and the average of 5%. Surface soil moisture is rated 48% short to very short, 50% adequate and 2% surplus. Subsurface moisture is rated 48% short to very short and 52% adequate.

Control pesky perennials with fall herbicide treatments

A variety of perennial weeds are best controlled in the fall. Following are treatment guides for hemp dogbane, leafy spurge, musk thistle, and several other perennial weeds.

Hemp dogbane

Hemp dogbane, along with most other perennial weeds, can best be controlled in September when it is in the bud stage. At this time, root buds will have a swollen or enlarged appearance. Apply 2,4-D at a 1.0 lb/active ingredient per acre rate at this time of year so the herbicide can move into the root system of the plant along with the herbicides. This treatment can be used in corn at least seven days prior to harvest.

Best control can be achieved if the 2,4-D treatment is made when the plant is not stressed by frost or a lack of moisture. Applications

made during a drought or after a frost will not be as effective because herbicide translocation is slowed. Other perennial weeds, unlike hemp dogbane, continue active growth even after the first frost.

Leafy spurge

Leafy spurge is a persistent, deep-rooted perennial which reproduces by seeds and roots. It is found primarily on untilled land and is a noxious weed in Nebraska. A well-planned program is necessary for adequate control. On cultivate land, a combination of crop rotations, cultivation and herbicides can provide good control of leafy spurge.

Herbicides for controlling leafy spurge in grassland are 2,4-D ester at 2 qt/A, 1 qt of 2,4-D + 1 pt of Tordon 22K or Tordon 22K at 2 to 4 qt/A. Tordon 22K is much more effective than 2,4-D against leafy spurge. Also, multiple treatments will be more effective than a single treatment in reducing leafy spurge root growth. Fall treatments to actively growing plants will provide better control than spring treatments.

Musk Thistle

Musk thistle is primarily a biennial, but may act as a winter annual or, less frequently, as an annual. It is a prolific seed producer, with one plant producing up to 20,000 seeds. It has spread throughout the state and will invade almost any site with sufficient moisture and light. Since this fall has started out moist in many areas of the state, the potential for large populations of musk thistle appears good.

Fall applications of herbicides for musk thistle are to be made after Oct. 1. Options include Tordon 22K at 6 to 8 fluid ounces, 2,4-D + Banvel at 1.0 qt + .5 pt, Ally at .3 ounce, Curtail at 2 pt, and 2,4-D at 1.5 to 2.0 qt. These herbicides will be most effective when the musk thistle is actively growing prior to a hard freeze. Tordon 22K is the best treatment when conditions are cool and dry.

Pesky perennials

As the perennial weed approaches the "dormant" stage of its life cycle, nutrients from the summer's top growth are translocated into the root system. Herbicides applied this fall can actively move with the nutrients. Canada thistle, Russian knapweed, field bindweed and many other perennial weeds can be effectively treated with herbicides at this time.

Herbicides which are most effective in controlling these perennials include Tordon at 1-4 qt/A depending on the weed and combinations of 2,4-D + Tordon. Banvel and Roundup combinations with 2,4-D are useful on Canada thistle and field bindweed. Applications, other than high rates of Tordon, must be made more than once to gain control. Tordon use for perennial weeds is limited to non-crop areas. Ally at .1 oz and Curtail at 2-4 pts can also be used for Canada thistle control. Treat after mid-September before a hard freeze occurs and when daytime temperatures are still in the 50s.

Alex Martin

Extension Weeds Specialist

John McNamara

Extension Assistant, Weed Science

Iron chlorosis of trees and shrubs

If you've got a sick tree or ornamental, you may want to check out a new University of Nebraska-Lincoln Extension publication. *Iron Chlorosis of Trees and Shrubs* describes the symptoms and causes of iron chlorosis in trees, shrubs and other ornamentals, includes color photos of damage, and provides three techniques for correcting it. Contact your area Extension Office or order a copy or write Bulletins, PO Box 830927, University of Nebraska, Lincoln, NE 68583-0927.

Models estimate spring levels

Soil moisture levels to be low in the west

As this year's growing season winds down, it's time to start thinking about the 1995 season. With the majority of cropland across Nebraska within 14 days of harvest, evapotranspiration rates are rapidly decreasing. The majority of precipitation received from this point forward will go toward soil water recharge. The recent trend toward above normal temperatures and below normal precipitation during the last 30 days has led to concerns about the possibility of a dry 1995 growing season.

The High Plains Climate Center has been modeling soil moisture across Colorado, Iowa, Kansas, Nebraska, North Dakota, and South Dakota for the past four years. The soil moisture model uses an energy balance approach to estimate crop water use. Important atmospheric variables which affect the energy balance include temperature, precipitation, relative humidity, solar radiation, and wind speed. Soil properties include bulk density, water holding capacity, wetting length, and the percent clay, sand, and silt. Crop stage and water use are determined by growing degree day accumulations.

Research during the late 1980s at a variety of sites across the HPCC region indicated that soil moisture could be monitored with a high degree of accuracy for a variety of soil types, climate regimes, and crop rotations. However, soil moisture estimates throughout the season are dependent on accurate initial estimates. Since subsoil levels were at field

Expected Precipitation for the Period 9/12/94 - 3/31/95 at the Following Probability Levels.			
Location	75 %	50 %	25 %
Grand Island	9.30	6.35	5.12
Lincoln	11.00	9.11	7.00
Omaha	11.70	9.27	7.10
Norfolk	11.14	8.55	6.41
North Platte	7.10	5.65	4.31
Valentine	7.70	6.20	5.05
Scottsbluff	4.41	3.80	2.90

Table 1. Precipitation probabilities at the seven National Weather Service sites across Nebraska.

capacity at the beginning of the 1994 growing season at most sites across Nebraska, we have a high degree of confidence in our estimates throughout the 1994 growing season.

Table 1 shows the precipitation probabilities at the seven National Weather Service sites in Nebraska. Probability intervals are 75%, 50%, and 25%. To reach the 75% probability level means that only 25 years out of 100 will be as wet or wetter. Consequently, the 25% threshold indicates that 75 years out of 100 will be as wet or wetter. Probability levels are based on these periods of records: Grand Island, 91 years; Lincoln, 42 years; Omaha, 98; Norfolk, 91 years; North Platte, 96 years; Scottsbluff, 69 years; and Valentine, 42.

Using the data from Table 1, dryland soil moisture projections for a six-foot profile can be made for April 1, 1995. Our research has indicated that between 50% and 70% of the moisture that falls from Sept. 1 through March 31 is stored in subsoil levels. The remainder of this precipitation is lost to evapotranspiration, soil evaporation, and soil runoff. Table 2 projections assume that under the 25%, 50%, and 75% precipitation probability levels, 70% of these totals will be held in subsoil levels. Along with the projection for next spring, estimates of current moisture status and the maximum holding capacity of the average soil type at each site are given.

(Continued on page 141)

	Estimated Soil Moisture				Projected Soil Moisture on 4/1/95 Under the Following Precipitation Probability Levels.					
	Field Capacity		as of 9/12/94							
	in	%	in	%	75%		50%		25%	
Location	in	%	in	%	in	%	in	%	in	%
Grand Island	12.0	100	3.7	31	10.2	85	8.1	68	7.3	61
Lincoln	12.5	100	6.2	50	12.5	100	12.5	100	11.1	89
Omaha	12.5	100	7.1	57	12.5	100	12.5	100	12.1	97
Norfolk	14.5	100	9.1	63	14.5	100	14.5	100	13.6	94
North Platte	12.0	100	1.8	15	6.8	56	5.8	48	4.8	40
Valentine	7.0	100	0.5	7	5.9	84	4.8	70	4.0	58
Scottsbluff	11.0	100	0.4	4	3.5	32	3.1	28	2.4	22

Table 2. Soil moisture projections for spring 1995.

Soil moisture levels *(Continued from page 139)*

Table 2 indicates the dry conditions across western Nebraska. Even if an extremely wet fall and spring occur, subsoil moisture levels will not completely recharge. In fact, the western wheat belt extending from Texas to North Dakota is in a similar predicament. Wheat will need timely rains this fall to insure adequate stand emergence, along with adequate rains next spring to insure fair yields. If current conditions continue, wheat yields could be severely reduced due to inadequate subsoil moisture.

Eastern Nebraska has good moisture at present. Unless the dry weather continues through this fall, adequate moisture levels will exist

in most locations for the 1995 growing season. An area encompassing eastern Nebraska, northern Iowa, and southern Minnesota appears to have the best subsoil moisture reserves. Subsoil levels across the eastern corn belt are critically short and yield prospects for 1995 will depend on how much recharge occurs this fall and next spring.

A note of caution should be exercised when using Table 2 projections. First, we are assuming that 70% of the precipitation reaches subsoil levels. Unless the fall is relatively cool, this estimate is overly optimistic. Thus, a best scenario result is projected in Table 2. Second, crop growth is not

completely finished in some locations, so some current subsoil moisture will be depleted by evapotranspiration. Third, probability levels are heavily weighted toward September, October, and March precipitation. Probability levels will drop below the 50% level with an extended dry spell (two weeks or more) during these months. Last, these projections are an estimate. Local planting conditions, cultivation practices, and rainfall can significantly impact moisture status. Conditions can vary 10% to 20% from current estimates.

Al Dutcher
State Climatologist
Agricultural Meteorology

Nebraska weather data as of September 11

142

CROPWATCH

Sept 16, 1994

Accumulated from	Growing degree days*				Precipitation***				Evapotranspiration rates						
	Fahrenheit, Base 50**				8/28-9/11		4/1-9/11		Emer	Prior	Prior	9/11	Next	Next	Days*****
	5/1	5/10	5/20	5/31	Act	%****	Act	%****	Date	Week	3 Days		3 Days	Week	
Ainsworth	2424	2354	2174	1990	.16	14	12.99	81	5/5	.00	.00	.00	.00	.00	-2
Alliance	2278	2198	2034	1883	.43	61	4.57	37	5/5	.19	.19	.15	.19	.19	2
Arthur	2362	2286	2124	1954	.59	70	11.68	82	5/5	.09	.09	.07	.09	.08	12
Beatrice	2736	2673	2505	2286	.74	40	16.49	82	5/5	.03	.03	.04	.03	.03	1
Central City	2626	2564	2383	2159	.01	1	13.40	75	5/20	.11	.13	.15	.13	.13	-7
Clay Center	2666	2604	2431	2221	.18	80	16.14	89	5/5	.09	.10	.12	.10	.10	0
Concord	2411	2361	2192	1989	2.95	220	17.09	96	5/20	.23	.25	.27	.26	.25	-10
Curtis	2639	2564	2394	2205	.23	26	9.26	60	5/5	.00	.00	.00	.00	.00	10
Elgin	2465	2410	2239	2033	.71	62	14.69	84	5/20	.27	.31	.32	.29	.28	-4
Gordon	2313	2243	2074	1928	.79	112	10.51	78	5/20	.38	.35	.27	.33	.33	5
Grant	2551	2471	2302	2116	.00	0	7.52	53	5/5	.00	.00	.00	.00	.00	2
Holdrege	2690	2618	2449	2249	.01	1	15.10	86	5/5	.00	.00	.00	.00	.00	4
Lincoln	2860	2798	2618	2382	1.13	68	16.37	89	5/5	.00	.00	.00	.00	.00	2
McCook	2770	2686	2506	2309	.28	31	12.64	84	5/5	.00	.00	.00	.00	.00	7
Mead	2617	2554	2384	2166	1.85	89	19.09	84	5/5	.12	.13	.15	.14	.14	-4
North Platte	2500	2426	2255	2069	.39	49	12.64	89	5/5	.03	.03	.03	.03	.03	6
O'Neill	2384	2321	2153	1968	3.15	281	20.47	125	5/20	.26	.31	.34	.30	.28	-9
Ord	2546	2479	2307	2107	1.54	119	19.80	118	5/20	.19	.22	.24	.22	.21	1
Red Cloud	2749	2684	2520	2313	.00	0	12.35	68	5/20	.25	.28	.31	.26	.24	3
Rising City	2606	2549	2381	2162	.59	40	16.85	99	5/5	.14	.16	.18	.16	.16	-2
Scottsbluff	2439	2345	2174	2003	.08	15	4.65	44	5/5	.00	.00	.00	.00	.00	5
Shelton	2682	2616	2433	2213	.76	54	16.97	100	5/5	.00	.00	.00	.00	.00	-1
Sidney	2384	2303	2149	1985	.20	33	10.47	84	5/5	.07	.07	.05	.06	.06	15
Tarnov	2518	2461	2296	2092	1.85	153	16.97	95	5/5	.00	.00	.00	.00	.00	-1
West Point	2568	2505	2331	2111	2.32	155	18.43	98	5/20	.25	.28	.33	.28	.27	-6

*Using the growing degree days accumulated since emergence as a guide:

Corn is estimated to mature at about 2400 gdds for short season hybrids; 2500 for midseason, and 2700 for long season hybrids;

Soybeans are estimated to mature at about 1950 for short season hybrids; 2360 for midseason, and 2450 for long season hybrids; and

Sorghum is estimated to mature at about 2125 for short season hybrids; 2200 for midseason, and 2350 for long season hybrids.

**Base 50 is used for corn, sorghum and soybean production.

***Precipitation is a seven-day summary ending Sept. 11.

****Percent of normal precipitation levels.

*****Days indicates number of days ahead or behind normal, relative to accumulated growing degree days on Sept. 11.